

STATE OF MONTANA MONTANA DEPARTMENT OF TRANSPORTATION JOB PROFILE

1.	Upda	te
	Form	al Review
		Date Submitted
SECTION I - Identification		
Working Title: Right of Way Design Tech	nician I & II	Department: Transportation
Job Code Number: 173134		Division & Bureau: Engineering/Right of Way
Job Code Title: Design Technician		Section & Unit:
Pay Band: 4		Work Address: Helena and Districts
Position Number: HQ: 60002, 60046, 60017, 60007, 60031, 0000000000000000000000000000000000		Phone:
FLSA Exempt FLSA Non-Exem	pt	Non-Union MPEA Blue Collar
Profile Completed By: Bruce Masiak, David Hoerning, Robert Sta	pley	Work Phone:

Work Unit Mission Statement or Functional Description:

The **Right of Way Bureau** acquires and manages land needed for transportation systems, provides assistance and payments to individuals and businesses relocated by highways, designs the right of way, and arranges for relocating utilities that conflict with highway construction. The Bureau includes the Design Plans, Appraisal, Acquisition, Utilities, Access Management, and Real Estate Sections.

The **District Offices** located across the state are responsible for supervising contract administration through the supervision and inspection of materials and workmanship on highway construction projects; performance of safety inspections on public owned bridges; and performance of preconstruction and construction surveys. These offices are located in Missoula, Butte, Great Falls, Glendive and Billings..

Describe the Job's Overall Purpose:

The Design Technician is entry level to the Designer series career ladder. The position is responsible for performing a variety of technical and pre-professional drafting and design duties. Assigned work

begins at the basic level and includes detailed instruction on what attributes need to be designed, data analysis and developing plan details.

SECTION II - Major Duties or Responsibilities

% of Time

The following duties and responsibilities are for both of the band 4 design technicians. Complexity levels and independent actions increase as the design technician progresses from level I to level II.

Design Technician 1 - Band 4 Level I

A. Performs moderate to complex design tasks in a variety of circumstances.

45%

Plots multiple types of section lines in CADD including subdivision and certificate-of-survey information, accurate plotting of controlling property corner section lines, interior section lines, land subdivisions and certificates of survey.

Researches plans, and records deeds and survey information of property corner monuments to determine existing right-of-way, and plots the existing right-of-way in CADD in the appropriate files and at the appropriate levels.

Reviews and analyzes title information to determine and accurately plot ownership and property boundaries in right-of-way CADD files. Plans are filed in the county courthouses and become part of the public record.

Prepares right-of-way documents using accepted vocational standards, while considering land required for the proposed highway facility, clear zones, and topographic features.

B. Prepares project documents and other reports for review by supervisor

25%

Prepare deeds, deed exhibits, and right-of-way plan sheets in order to map and acquire all interests of land necessary to construct and maintain a specific project

Creates the deed exhibit file in CADD so it can be legally recorded.

C. Performs research and investigations as directed.

25%

Prepares and distributes correspondence to obtain information to complete right-of-way plans. This includes title information, survey data, and construction details; memos explaining right-of-way plans, letters answering questions from other sections or the public, distribution of plans or deeds, and/or special study reports.

Reviews and analyzes various reports for the design of right-of-way for highway projects to determine information pertinent to right-of-way design.

Develops exhibits for right-of-way acquisition, including graphic indications to scale on aerial photographs of section corners and lines, project centerline, existing right-of-way, proposed new right-of-way, property boundaries, and roads or other topographic features. This requires knowledge of land survey procedures, math, and property descriptions.

Assists with instruction of co-workers on the principles, techniques, methods and equipment used to prepare right-of-way plans, deeds, and exhibits.

Attends final plan reviews to clarify and determine completeness of right-of-way plans and coordinate final plans with other organizations.

Other Duties 5%

Performs a variety of other duties as assigned in support of Section, Bureau and MDT goals and objectives. Assists other MDT programs on special projects and attending training and educational sessions as required.

Design Technician II - Band 4 Level II

A. Performs moderate to complex design tasks in a variety of circumstances.

35%

Plots multiple types of section lines in CADD including subdivision and certificate-of-survey information, accurate plotting of controlling property corner section lines, interior section lines, land subdivisions and certificates of survey.

Researches plans, and records deeds and survey information of property corner monuments to determine existing right-of-way, and plots the existing right-of-way in CADD in the appropriate files and at the appropriate levels.

Reviews and analyzes title information to determine and accurately plot ownership and property boundaries in right-of-way CADD files. Plans are filed in the county courthouses and become part of the public record.

Prepares right-of-way documents using accepted vocational standards, while considering land required for the proposed highway facility, clear zones, and topographic features.

Calculates survey ties and right-of-way breaks as needed using a programmable calculator or CADD software and knowledge of land surveying, including land areas using applied geometry and trigonometry.

Checks calculation accuracy and right-of-way plans done by others, interprets data, and evaluates related procedures and actions taken based on circumstances.

B. Prepares project documents and other reports for review by supervisor

35%

Prepare deeds, deed exhibits, and right-of-way plan sheets in order to map and acquire all interests of land necessary to construct and maintain a specific project

Creates the deed exhibit file in CADD so it can be legally recorded.

Checks legal descriptions in deeds are complete and accurate with a written description, centerline description, and deed exhibit. The written description explains in words the property to be transferred and conditions of the transfer. The exhibit graphically portrays the property to be transferred.

C. Performs research and investigations as directed.

25%

Prepares and distributes correspondence to obtain information to complete right-of-way plans. This includes title information, survey data, and construction details; memos explaining right-of-way plans, letters answering questions from other sections or the public, distribution of plans or deeds, and/or special study reports.

Reviews and analyzes various reports for the design of right-of-way for highway projects to determine information pertinent to right-of-way design.

Develops exhibits for right-of-way acquisition, including graphic indications to scale on aerial photographs of section corners and lines, project centerline, existing right-of-way, proposed new right-of-way, property boundaries, and roads or other topographic features. This requires knowledge of land survey procedures, math, and property descriptions.

Assists with instruction of co-workers on the principles, techniques, methods and equipment used to prepare right-of-way plans, deeds, and exhibits.

Attends final plan reviews to clarify and determine completeness of right-of-way plans and coordinate final plans with other organizations.

Administers activities with title insurance companies to secure final title evidence for properties adjoining pending highway construction projects.

Other Duties 5%

Performs a variety of other duties as assigned in support of Section, Bureau and MDT goals and objectives. Assists other MDT programs on special projects and attending training and educational sessions as required.

The following duties and/or specific tasks listed under section II above are considered "essential functions" because they require specialized expertise and skill and are the primary reasons the job exists (they must be performed by this position with or without accommodations):

Duties described in both levels for A, B & C are essential functions for why the job exists.

The following mental and physical demands are associated with these essential functions:

PHYSICAL

- Mostly office work with occasional periods of extensive field work with overnight stays.
- Lifting objects in excess of 30 lbs.
- Extensive travel throughout the state or district to project locations
- Ability to walk over uneven terrain or in water
- Operating a personal computer
- Communicating in writing, in person and over the phone
- Continual walking or standing
- Exposure to extreme weather and high-speed traffic
- Operation of motor vehicles
- Operation of power tools and/or equipment

MENTAL

- Ability to perform work under tight schedules and stressful situations.
- Ability to prioritize work due to multitude of sites, corridors and safety reviews.
- Computing arithmetic operations
- Comparing data
- Compiling information, Analyzing, Coordinating, Synthesizing, Negotiating, Instructing
- Ability to multi-task
- Ability to meet inflexible deadlines
- Decision-making that affects the public health and safety

- Instructing
- Professional interpersonal skills and behaviors
- Dealing with the public on a regular basis
- Demands for accuracy in all aspects of work

OFOTION III Minimum One lift and in the			· Clark In · · · Clark
Attach an Organizational Chart.			
Does this position supervise others?	Yes	No	

SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

KNOWLEDGE:

Understanding the concept of design drafting technology. Working knowledge of computer aided drafting and design (CADD) software packages

SKILLS:

Effective written and verbal communication with a variety of audiences, maintain professional working relationships, and can operate various types of office equipment.

Behaviors required to perform these duties:

See MDT Core Behaviors

Education:

Check the <u>one box</u> indicating minimum education requirements for this position for a new employee the first day of work:

	No education required	Related AAS/2-years college/vocational training
~	High school diploma or equivalent	Related Bachelor's Degree
	1-year related college/voc. training	Related Master's degree

Please specify the acceptable fields of study:

Design Technician I - Band 4 level 1

High school degree or equivalent and some technical training or experience in drafting and technical work in highway design, transportation planning, highway construction or traffic engineering.

Designer Technician II - Band 4 level 2

High school degree or equivalent and at least one year of technical training or experience in design drafting technology that includes a working knowledge of computer aided drafting and design (CADD) software packages.

Experience:

	ck the <u>one box</u> indicating minimum work-relate loyee the first day of work:	d exp	perience requirements for this position for a new
	No prior experience required✓ 1 year✓ 2 years		3 years 4 years 5 or more years
SEC	TION IV – Other Important Job Information		
	Fingerprint check		✓ Valid driver's license
	Background check		Other; Describe

SECTION V – Signatures		
Signature indicates this statement is accu	urate and complete.	
Employee:		
Name:	Title:	
Signature:	Date:	
Immediate Supervisor:		
Name:	Title:	
Signature:	Date:	
Bureau Chief:		
Name:	Title:	
Signature:	Date:	
Division/District Administrator:		
Name:	Title:	
Signature:	Date:	
Department Designee:		
Jennifer Jensen/Designee	Chief Human Resources Officer Human Resources Division	
Signature:	Date:	